

REMARKS

The last Office Action has been carefully considered.

It is noted that claims 1-3, 6-8, 10 and 15 are rejected under 35 U.S.C. 103 (b) Neu, et al.

Claims 4-5 and 9 are rejected under 35 U.S.C.103 (a) in view of the patent to Neu over the patent to Martinez.

After carefully considering the Examiner's grounds for the rejection of the claims over the art, applicants have amended claim 1, the broadest claim on file, and added claim 23 which is another independent claim.

It is respectfully submitted that at least claims 1 and 23 clearly and patentably distinguish the present invention from the prior art applied by the Examiner against the original claims.

Turning now to the prior art applied by the Examiner, in particular to the patent to Neu, it is respectfully submitted that this reference

discloses a drill bit operating system which steers the working modus of the drill bit. Especially, it discloses that the drill bit is connected with a sensor system for sensing the axial force of the tool (the drill bit) with the effect to steer the axial movement direction of the tool dependent on the amount of the sensed axial force. Such an arrangement has the advantage that the tool works high-efficient, because the axial speed of the tool can be changed in this moment when the tool contacts the workpiece (the axial force suddenly increases), and the tool can be retracted from the workpiece immediately when the axial force suddenly decreases (the tool has finished passing through the workpiece).

For such an arrangement it is not necessary to determine the depth/the length of the passing through the workpiece because only information about the actual position of the tool is needed and not information about different positions to determine the length of the tool's way through the workpiece.

The Examiner's statement in column 3, lines 16-12 that this reference discloses an arrangement which determines the depth of the drill bit through a workpiece (a material thickness signal) is not correct.

In connection with this, applicants have amended claim 1 and submitted claim 23 which is another independent claim. Claim 1 in addition to its original language defines the measured path based at least on measurements of a resistance proportional signal X_e and an axial speed proportional signal X_v .

Claim 23 specifically defines the following steps:

- to sense a resistance proportional signal X_e and at least one axial speed proportional signal X_v ,
- the resistance proportional signal X_e and the axial speed proportional signal X_v are input signals of the evaluation unit 20,
- the evaluation unit 20 calculates a depth proportional output signal Y ,
- the output signal Y defines at least the penetration depth signal Y_1 .

This is disclosed for example on page 12, last paragraph, and page 15, description of Figure 2.

It is respectfully submitted that the new features of the present invention which are now defined in claims 1 and 23 are not disclosed in the patent to Neu.

The original claims were rejected over this reference under 35 U.S.C. 102 as being anticipated. In connection with this, applicants wish to cite the decision in re Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984) in which it was stated:

"Anticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Definitely, the patent to Neu does not disclose each and every element of the present invention as defined in claims 1 and 23.

It is therefore believed that the rejection of the original claims as being anticipated over the patent to Neu should be considered as not tenable with respect to claims 1 and 23 and should be withdrawn.

The patent to Martinez also does not teach the new features of the present invention as defined in claims 1 and 23. Therefore the Examiner's rejection of some rejected claims over the combination of these two references should be considered also as not tenable, since any combination of these two references would lead only to such a method which

would not include the new features of the present invention currently defined in claims 1 and 23.

It is therefore respectfully submitted that claims 1 and 23 should be considered as patentably distinguishing the present invention over the art and should be allowed.

As for the dependent claims, these claims depend on claim 1, they share its presumably allowable features, and therefore it is respectfully submitted that they should be allowed as well.

Reconsideration and allowance of the present application is most respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place this case in condition for final allowance, then it is respectfully requested that such amendments or corrections be carried out by Examiner's Amendment, and the case be passed to issue. Alternatively, should the Examiner feel that a personal discussion might be

helpful in advancing this case to allowance, he is invited to telephone the undersigned (at 631-549-4700).

Respectfully submitted,



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